

Date: Sun, 24 Apr 94 04:30:26 PDT
From: Ham-Homebrew Mailing List and Newsgroup <ham-homebrew@ucsd.edu>
Errors-To: Ham-Homebrew-Errors@UCSD.Edu
Reply-To: Ham-Homebrew@UCSD.Edu
Precedence: Bulk
Subject: Ham-Homebrew Digest V94 #109
To: Ham-Homebrew

Ham-Homebrew Digest Sun, 24 Apr 94 Volume 94 : Issue 109

Today's Topics:

 cheap keyer??
 Comments on the new OHR "Classic" 20/40 meter QRP transceiv
 Direction Finder (2 msgs)
 Ethernet coax antenna feed? (2 msgs)
 Fixing HV supply on 'scope
 Output power measurement
 RS232 help (2 msgs)
 TI 320C26 DSP Eval Kit
 Trimmer Caps

Send Replies or notes for publication to: <Ham-Homebrew@UCSD.Edu>
Send subscription requests to: <Ham-Homebrew-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Homebrew Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-homebrew".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 22 Apr 94 16:39:54 CST
From: ihnp4.ucsd.edu!swrinde!news.uh.edu!ccsvax.sfasu.edu!ccsvax.sfasu.edu!
f_speerjr@network.ucsd.edu
Subject: cheap keyer??
To: ham-homebrew@ucsd.edu

Plan to make a small, simple cheap keyer out of a 555 and some odd parts. I can
figure out the details myself, but thought I'd try to avoid reinventing the
wheel. There must be such a circuit out there somewhere, no?

Thanks!
-Jim-
K5YUT

Date: 22 Apr 1994 07:42:03 -0400
From: ihnp4.ucsd.edu!usc!howland.reston.ans.net!europa.eng.gtefsd.com!
news.ans.net!hp81.prod.aol.net!search01.news.aol.com!not-for-mail@network.ucsd.edu
Subject: Comments on the new OHR "Classic" 20/40 meter QRP transceiv
To: ham-homebrew@ucsd.edu

is the receiver for this new rig copied from any of the well known published DC
circuits, or is it a Superhet?

73 de JimN00CT

ENTROPY AINT WHAT IT USED TO BE!

Date: 21 Apr 1994 18:13:06 GMT
From: ihnp4.ucsd.edu!usc!nic-nac.CSU.net!charnel.net.csuchico.edu!charnel!olivea!
news.bu.edu!toyo@network.ucsd.edu
Subject: Direction Finder
To: ham-homebrew@ucsd.edu

Dose anybody has experience of making the Doppler direction finder??
Which has 4 or 8 fixed vertical antennas, and gives bearing of 360 degrees
in digital with 1 degree precision??

I am thinking to make one for my experiment. Although it is quite popular
in communication field, such as FAA(for air crafts) or police(Lo-Jack), I
could not locate any article or source of a Doppler Radio Direction Finder.

If you know something about this, please let me know!! Is any article
available on a certain magazine, electric book(?) on internet or diagrams of
it??

Your advise, comment, and anything related to a Doppler Directional Finder
will be greatly greatly greatly appreciated!!
Again, thank you very much in advance!!

toyo@bu.edu
in Boston

Date: 22 Apr 94 14:07:00 GMT
From: agate!ihnp4.ucsd.edu!swrinde!gatech!newsxfer.itd.umich.edu!nntp.cs.ubc.ca!

utcsri!newsflash.concordia.ca!pavo.concordia.ca!md_hill@ucbvax.berkeley.edu
Subject: Direction Finder
To: ham-homebrew@ucsd.edu

In article <2p6fni\$4rl@news.bu.edu>, toyo@bu.edu (Toyo Cheng) writes...
>Dose anybody has experience of making the Doppler direction finder??
>Which has 4 or 8 fixed vertical antennas, and gives bearing of 360 degrees
>in digital with 1 degree precision??
>
>I am thinking to make one for my experiment. Although it is quite popular
>in communication field, such as FAA(for air crafts) or police(Lo-Jack), I
>could not locate any article or source of a Doppler Radio Direction Finder.
>
>If you know something about this, please let me know!! Is any article
>available on a certain magazine, electric book(?) on internet or diagrams of
>it??

The book "Transmitter Hunting: Radio Direction Finding Simplified" By Joe Moell
K00V and Tom Curlee, WB6UZZ (TAB books ISBN 0-8306-2701-4) has a large section
on this topic. They talk extensively about the Roanoake Doppler which is supposed
to be pretty good for the money. A second source is of course the ARRL handbook
(No ham should be without one).

Good Luck

-Mark Hillier Internet: MD_HILL@pavo.concordia.ca
 Amateur: VE2HVV
 PACKET: VE2HVV@VE2FKB
" I hear, I forget. I see, I remember. I do, I understand"

Date: Thu, 21 Apr 1994 23:07:31 GMT
From: ihnp4.ucsd.edu!swrinde!gatech!kd4nc!ke4zv!gary@network.ucsd.edu
Subject: Ethernet coax antenna feed?
To: ham-homebrew@ucsd.edu

In article <2DB6AEFB@msmail.uthscsa.edu> MUENZLERK@uthscsa.EDU (Muenzler, Kevin)
writes:
>On 18 Apr James Wrote:
>>Does anyone have experience using IEEE 802.3 "thicknet" cable for antenna
>>feeds?
>
>James,
>I would not recommend using EtherNet cable for use on a transmitter.
>Sure it is very good cable with low loss. However, if you will notice,
>probably stamped on the side of the cable is "50 Volts MAX" or something

>like that. If you have any of the "standard" rigs on the market that will
>put out 100 or so watts you will quickly burn through the cable insulation.

There is no reason to panic. That labelling is on the cable so that it
does not have to be run in conduit in commercial installations. The NEC
allows low voltage wiring to be run outside of conduit, so they mark the
cable with a low voltage warning to make the electrical inspectors happy.
In fact, the voltage breakdown is about 8,000 volts, just like RG-8, assuming
there are no vampire tap holes in the cable of course. If the cable is
used, and full of tap holes, all bets are off.

Gary

--

Gary Coffman KE4ZV		You make it,		gatech!wa4mei!ke4zv!gary
Destructive Testing Systems		we break it.		uunet!rsiatl!ke4zv!gary
534 Shannon Way		Guaranteed!		emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244				

Date: Fri, 22 Apr 1994 06:10:44 GMT
From: ihnp4.ucsd.edu!library.ucla.edu!csulb.edu!csus.edu!netcom.com!
wa2ise@network.ucsd.edu
Subject: Ethernet coax antenna feed?
To: ham-homebrew@ucsd.edu

In article <2DB6AEFB@msmail.uthscsa.edu> MUENZLERK@uthscsa.EDU (Muenzler, Kevin)
writes:

>James,
>I would not recommend using EtherNet cable for use on a transmitter. Sure it is
>very good cable with low loss. However, if you will notice, probably stamped
>on the side of the cable is "50 Volts MAX" or something like that.

Reason for the "50V max" has more to do with National Electrical Code rules
than what the cable would be able to take. Apparently, the NEC rules are
looser with voltages below 50V, being used for "signal" purposes and not
for power deliverly. So, the manufacturer just marks it "50V max" to
avoid the extra grief of getting approval to handle higher voltages.
Ethernet is intended to be strung thru building ceilings and walls, and
would fall under NEC rules for safety and such.

Ethernet cable should be able to handle anything that foam RG8U can, or
pretty close.

Date: 22 Apr 94 02:33:06 GMT
From: agate!howland.reston.ans.net!news.ans.net!hp81.prod.aol.net!

search01.news.aol.com!not-for-mail@ucbvax.berkeley.edu

Subject: Fixing HV supply on 'scope

To: ham-homebrew@ucsd.edu

I'm not familiar with your scope, but the majority of the time, the HV transformer only puts out about 300VAC. A voltage multiplier/rectifier circuit does the rest. Usually, the primary of the transformer is fed with either line voltage, or for better filtering of line noise in the Z-axis, 12-25Vdc oscillated into a square or sine wave.

You may try taking an RMS voltmeter to the primary side of the xfmr to see where you need to start from.

If you need more help, E-Mail me at JoeKd4uow@AOL.COM

Joe Freeman

Kd4UOW

Date: 22 Apr 94 02:27:03 GMT

From: agate!howland.reston.ans.net!news.ans.net!hp81.prod.aol.net!

search01.news.aol.com!not-for-mail@ucbvax.berkeley.edu

Subject: Output power measurement

To: ham-homebrew@ucsd.edu

About measuring more than 1kw at vhf with a model 43, One simple solution is to build a directional coupler with the coupled value at about 40 dB. This method would require two dummy loads, one that would handle about 2.5-3 kw for safety sake, and one that would handle 50 watts CW. Accuracy would not be great, but if you haven't had your 43 cal'd in the last six months to a laboratory standard, it's worse than about 10% anyway. Reverse the coupler to measure reflected power.

Hope this helps,

Joe Freeman

KD4UOW

Date: Thu, 21 Apr 1994 17:52:25 -0400

From: titan.ksc.nasa.gov!algol.ksc.nasa.gov!k4dii.ksc.nasa.gov!user@ames.arpa

Subject: RS232 help

To: ham-homebrew@ucsd.edu

In article <115@paradox.win.net>, bon@paradox.win.net (Joaquin Bonilla) wrote:

> I'm working in a project where I have to communicate a certain
> machine with a host for calibration purposes. A 3 wire RS-232

> interface is used. While I can communicate from a terminal with the
> machine, I have tried unsuccessfully to write a C-subroutine for
> that purpose (further analysis should be done in the host).

JB-

It sounds as if your computer was using a "hardware handshaking" routine.
You may only need to disable the handshake requirements at the computer end
of the link. I assume the three wires are send, receive and signal ground.
It might be as simple as connecting RTS to CTS.

73, Fred, K4DII

Date: 22 Apr 1994 21:06:54 GMT
From: ihnp4.ucsd.edu!sdd.hp.com!hpscit.sc.hp.com!icon!hpchase.rose.hp.com!
cmoore@network.ucsd.edu
Subject: RS232 help
To: ham-homebrew@ucsd.edu

The problem is that the BIOS serial routines are expecting hardware
handshaking. Quoting from my BIOS manual:

Int 14H XMIT
Transmits a data byte on the serial port specified by the DX register.
The function enables REQUEST-TO-SEND and DATA-TERMINAL-READY signals,
and then waits on the DATA-SET-READY, CLEAR-TO-SEND, and REGISTER-EMPTY
signals...

You need to tie RTS to CTS and DTR to DSR. That should fix the problem.

Chris Moore
N6IYS
cmoore@mothra.rose.hp.com

Date: Fri, 22 Apr 1994 04:35:32 GMT
From: olivea!news.bu.edu!att-in!cbnewsm!jeffj@ames.arpa
Subject: TI 320C26 DSP Eval Kit
To: ham-homebrew@ucsd.edu

In article <CoI6oM.C1C@vectorbd.com> jp11@vectorbd.com (Jim Lill) writes:
>[Article crossposted from rec.radio.amateur.digital.misc]
>[Author was Jim Lill]
>[Posted on Sat, 16 Apr 1994 23:56:43 GMT]
>

>Has anybody done anything with TI's \$99 320C26 Evaluation Kit?

>

>-Jim wa2zkd

No but I would love to, could you tell us more about it?

Jeff

--

Jeff Jones AB6MB | Vote out those who voted for the North American
jeffj@seeker.mystic.com | Free Trade Agreement!
Infolinc BBS 510-778-5929 |

Date: 22 Apr 94 13:59:00 GMT
From: agate!howland.reston.ans.net!europa.eng.gtefsd.com!gatech!
newsxfer.itd.umich.edu!nntp.cs.ubc.ca!utcsri!newsflash.concordia.ca!
pavo.concordia.ca!md_hill@ucbvax.berkeley.edu
Subject: Trimmer Caps
To: ham-homebrew@ucsd.edu

I would like to thank all those who supplied info on a source for trimmer caps.
I now realize that I should have been slightly more specific in my request. I
was looking for a chassis mount type of hi-Q trimmer (a Johanson 5400 type to
be specific). The cap is to be used in the helical filter design in the
"Transitter Hunting: Radio direction finding simplified" book by K0o0V and
WB6UZZ.

Message-ID: <22APR199408595206@pavo.concordia.ca>
Organization: Concordia University
News-Software: VAX/VMS VNEWS 1.41

I have since found that Electrosonic carries them....at \$20 EACH (Yeowch!).
At this point, I am looking at Johnson air variables as a possible substitute.
Even they are about \$10 each.

-Mark Hillier Internet: MD_HILL@pavo.concordia.ca
Amateur: VE2HVV
PACKET: VE2HVV@VE2FKB

" I hear, I forget. I see, I remember. I do, I understand"

End of Ham-Homebrew Digest V94 #109
